

SUPPORTING WORKPLACE HEALTH PROMOTION FOR WORKERS IN SLOVENIAN SMALL BUSINESSES

Introduction

This case study presents a comprehensive workplace intervention targeting small and medium enterprises (SMEs) in the western part of Slovenia. Over 4 years, it supported workers and employers in applying tailored health promotion measures in the workplace. Success factors included the initial screening of companies and workers to understand their needs and to tailor interventions accordingly, as well as the use of digital technologies to increase participant engagement.

This case study is part of a research project that aims to provide an overview of regulations, policies, strategies, initiatives and programmes for the prevention of work-related cardiovascular diseases (CVDs).¹

Description of the case

The STAR-VITAL was a 4-year workplace health promotion (WHP) programme aimed at reducing absenteeism and sick leave by creating healthy workplaces that prevent the occurrence and support the management of chronic diseases, including CVDs (Republika Slovenia, 2020).

It was initially implemented under the partnership of the University of Primorska, the National Institute of Public Health, the Chamber of Craft and Small Business of Slovenia, and the Angela Boškin Faculty of Health Care.

The programme was initially designed for workers aged 45 and above but the activities proved equally relevant to younger workers, so all staff were invited to participate. Overall, 95 companies were involved in STAR-VITAL by implementing measures to reduce absenteeism. SMEs were specifically targeted, not only because they represent the majority of the Slovenian businesses, but also because they are known to lack resources to invest in health programmes and so are in more need of support. The programme included collaboration across different stakeholders such as kinesiologists, physiotherapists, psychologists, biopsychologists, public health experts and researchers. Its efficacy was evaluated in a paper by Širok et al. (2022).

The project was launched on 31 August 2017 and ended on 30 September 2022, when national political priorities shifted and WHP lost momentum at the policy level. Although there is currently little funding in Slovenia for workplace health initiatives, some legacy effects remain. For example, the Chamber of Craft and Small Business of Slovenia, which was a STAR-VITAL partner, continues to champion elements of the programme in its work with participating SMEs, even if on a smaller scale.

Funding came primarily from the European Structural Fund (ESF) 2014-2020, which covered around 80% of the budget, with the remainder provided by the Ministry of Labour, Family, Social Affairs and Equal Opportunities of Slovenia. The programme emerged within a priority area of the EU Cohesion Programme, reflecting Slovenia's recognition of demographic challenges, and an ageing population and workforce, as well as high absenteeism. The funding was allocated through a public tender and applied specifically to the western part of Slovenia.

¹ The full report — *Work-related cardiovascular disease prevention: regulations, policies, strategies and initiatives* —, is available at: <https://osha.europa.eu/en/publications/work-related-cardiovascular-disease-prevention-regulations-policies-strategies-and-initiatives>

Aims

The programme's general objective was to foster healthy workplaces, creating awareness of the promotion and protection of health in the workplace, and preventing and managing chronic diseases in the workplace. Specifically, the aims were either 'intermediate' or 'final'.

Intermediate outcomes refer to indirect benefits of the programme, such as:

- changes in the behaviour of the target population after the interventions
- improvements to the working environment, nutritional habits, strategies of coping with stress, and sleep hygiene.

Final outcomes, refer to the ultimate objectives of the programme, defined as:

- preventing the occurrence of chronic disease, including CVDs
- reducing sick leave and absenteeism and their effects on the type and age of retirement (e.g. early retirement due to ill health).

What was done and how

The initiative began with a careful planning exercise, organised into five main work packages.

Scoping phase

- **Learn from good practices.** The first step consisted of learning from European good practices on age management in the workplace. This included age-related factors affecting the daily management of workers, as well as the design and organisation of the individual work tasks and the work environment, to allow workers to live longer, healthier working lives (Ilmarinen, 2006). The Slovenian team (made up of professionals, including management, economic and public health experts) visited the Finnish Institute of Occupational Health (FIOH), because, according to the stakeholders interviewed, it was at the forefront of the application of evidence-based occupational safety and health (OSH) policies. The team subsequently drafted procedures, designed screening questionnaires and evaluation tools, and created the content of the workshops.

Implementation phase

1. **Recruitment of companies.** Recruitment began with the project team generating a list of SMEs and contacting them by telephone to explain the purposes of the programme. Interested companies were visited in person. If the SMEs agreed to participate, the team held a promotional workshop to introduce the initiative and emphasise the business case of running the programme within the company. Workers who wished to join gave written consent and completed a screening questionnaire. It is worth noting that during the COVID-19 period, such procedures were facilitated via an online questionnaire which gathered individual information on lifestyle habits such as nutrition, physical activity, stress and sleep. It also collected company information such as exposure to work-related risks, workplace climate, existing health promotion activities, intentions to change and socio-demographic details.
2. **Selection of tailored support.** The results of the questionnaire and further discussions with the company allowed the team to fully understand the needs of each company and the specific day-to-day work-related risks. This allowed the team to tailor each of the proposed activity types to the type of work conducted (for example, sedentary versus active) and individual needs and exposures.
3. **Project interventions.** A total of eight activity types and tools were offered to each company for voluntary participation based on their needs.
 - a. **E-platform:** this was mainly used to distribute content to the participants. It consisted of around 250 webpages containing videos, education materials and interactive content aimed at promoting positive behavioural change. The material, either informative or interactive, took into consideration the role of the worker (or manager, employer or health promoter) and the identified risk factors (e.g. sedentarism). Each individual received around 10 to 15 units of material over 3 months. The e-platform also monitored users' engagement and sent reminders according to the user's level of activity or inactivity. In all, 1,028 workers enrolled and actively participated in the e-platform.

- b. **Workshops:** this included topics such as nutrition, stress management, physical activity, ergonomics, sleep hygiene, communication, work climate, absenteeism and implementing WHP programme activities. They were held either online or in person. A total of 30 workshops were organised, attended by 319 people.
 - c. **Coaching and mentoring:** these sessions were targeted at managers of the companies, to support them in the implementation of the activities. This approach was described as 'train the trainer', as managers were incentivised to be health promoters of the activities.
 - d. **Support for creating a favourable work environment:** companies received analysis and recommendations focusing on ergonomics or nutrition within their workplace settings. A team of nutritionists, public health experts, physiotherapists and kinesiologists collaborated with the management team of each company to help them implement the required changes. For instance, if a lack of healthy food options was identified as a risk factor, nutritionists advised companies in designing healthier menus. If musculoskeletal issues were identified, companies were provided with ergonomic and equipment accommodations, such as adjustable workstations. In addition, workers were offered weekly exercises.
 - e. **STAR-VITAL wiki-page:** this website included around 150 health protection and promotion measures presented to companies, together with guidance for their implementation.
 - f. **STAR-VITAL website:** this dedicated website was created to attract companies to participate in the initiative. It also included a collection of 15-minute guided video exercises (published daily from November 2020) and media communications about the programme.
 - g. **Conferences:** presentations were organised during the programme to extend awareness of it and to highlight learning and best practices. In total, 10 conferences were organised, involving 1,062 participants.
 - h. **Media appearances:** the project team put extensive effort into ensuring the initiative was well known across the country, participating in TV shows and magazine interviews to widen the scope and reach of the programme.
4. **Evaluation.** The project was evaluated in two phases, by comparing the intervention group with a control group of workers from similar Slovenian companies which had not participated. The first phase measured, through self-assessment questionnaires, whether the intervention was successful in achieving the intermediate outcomes of improving the working environment, encouraging healthy dietary habits, and improving stress-coping mechanisms and sleep hygiene. The second phase of the evaluation looked at whether the intervention was successful in achieving the final health outcomes of reducing absences from work due to illness and the effect on retirement (such as early retirement due to ill health). The evaluation examined the behavioural patterns of 370 employees from 26 companies participating in the web-based educational campaigns on nutrition and physical activity. Most of these workers (57.3%) were engaged in sedentary work.

What was achieved

The programme's evaluation is described in two scientific papers (Širok et al., 2022; Stubelj et al., 2023). The evaluation analysed engagement metrics based on measuring web analytics (such as traffic to the webpage and participants' interaction with emails), demographic characteristics and self-assessment questionnaires. In addition, the team aimed to measure changes in rates of absenteeism, sick leave and the type of sick leave, using both national statistics data and participants' self-reported questionnaires.

High levels of engagement were achieved with personalised digital content. For example, positive behavioural change was reported in physical activity (walking, stretching routines), nutrition habits (reduced salt, improved lunch habits) and stress-coping mechanisms. Interestingly, engagement was higher among older male participants and those engaging in sedentary work. Participants with healthy nutritional habits and a healthy body mass index (BMI) were found to be the most engaged users of the web material.

When comparing pre- and post-intervention outcomes between the intervention group and the control group, the intervention group showed a slight reduction in levels of absenteeism and sick leave, although a low post-intervention response rate limited the statistical significance of these findings. In

addition, management reported an increased capacity and willingness to support ageing workers with chronic conditions.

Success factors and challenges

The initiative can be considered as an example of a comprehensive application of evidence-based practices not only aimed at engaging workers and employers to perform health-behavioural change, but also at changing the culture surrounding health within the workplace by increasing the awareness of risk factors related to chronic diseases, including CVDs. The following success factors and related challenges have been identified.

Addressing multiple risk factors within the workplace

The programme took a holistic approach to the prevention and promotion of health (including cardiovascular health) by tackling not only behavioural risk factors but also psychosocial factors and wider organisational issues within the SMEs. It supported workers in making positive, sustainable behavioural changes, such as taking regular physical activity, eating balanced diet, managing stress, adopting better sleep hygiene and building healthy relationships at work. It also supported the SME management team in implementing those changes, which, without support, would probably have been unachievable. In practice, this meant bringing management on board by assisting them in solving other company issues (outside the scope of the programme), offering ergonomic materials for workplace adaptations, improving interpersonal work relationships and providing stress-coping mechanisms.

Using customer relationship management (CRM)² techniques to increase engagement

One of the key success factors included the use of several communication formats, which made support easy to access, flexible enough to be tailored to individual needs, and cost effective. Support ranged from face-to-face counselling sessions and workshops to online videos, live conferences, recorded sessions and interactive games. All the online material was grouped within the online e-platform and communicated to the participants via email and text messages (SMS).

STAR-VITAL was initially designed to offer mainly face-to-face support but had to be adapted under the constraints of the COVID-19 pandemic. This represented a significant challenge for the study team, which had to quickly adapt the online support to the changing circumstances. This flexibility proved to be an incredible success factor, as it allowed participants to take part wherever possible, as well as providing the latest COVID-19 national health advice. Furthermore, it allowed the project team to access a range of data analytics to monitor how the participants engaged with the distributed material and evaluate whether changes were needed as the programme progressed.

Bringing SMEs on board

Another challenge that ultimately became a success factor was the engagement of SMEs. This required significant efforts from the project team because SMEs are known to be less likely to host health interventions (OECD, 2022) so positively engaging with them and bringing them on board with the programme's objectives from the start was key to the success of the programme. At the selection stage, the study team stressed the benefits of the company joining the programme, selling the business case of improving employees' health as a long-term investment in the enterprise. In addition, the team offered companies unrelated OSH support, such as general management support, which was key to bringing them on board.

During implementation, the study team was in continuous contact with the management team of each company, supporting them online and in face-to-face meetings. This personal relationship ensured managers championed the activities on a day-to-day basis rather than seeing them as external and burdensome. In addition, it allowed continuous feedback on the views about, and perceptions of, the intervention, tracking progress and adjusting support to best suit the ongoing needs of SMEs. Furthermore, there were opportunities for companies to network and share experiences.

² CRM strategies can be used to boost customers' satisfaction and engagement through data analysis, personalised engagement and automation.

Forming an interdisciplinary team

The project team was composed of a range of professionals who applied their knowledge within the workplace, including public health experts, nutritionists, physiotherapists, kinesiologists, human resource specialists and economists. Having team of specialists from different professions allowed interventions to be tailored to the specific needs of each company and individual, providing a holistic approach to tackling health issues within the workplace.

Transferability to other EU Member States

The initiative can be considered as a strong evidence-based programme that directly and holistically targets occupational risk factors linked to the onset of non-communicable diseases, by considering the workplace as both a setting and a variable that can exacerbate or protect against the impact of physical, socio-economic, psychological and environmental risk factors. It provides a strong model for transferability, as the evaluation paper by Stubelj et al. (2023) describes in detail the study design and its implementation.

The combination of workplace health interventions and CRM techniques creates a multifaceted, individualised approach. These features make STAR-VITAL particularly attractive for application in EU settings, where tailored support coupled with digital tools is growing in popularity.

After the initial establishment phase (including creating the project team, selecting the organisations and tailoring the offer to their needs), the programme's reliance on online delivery offers considerable cost advantages over traditional workplace health interventions. The opportunity to deliver content remotely, engage with participants through several channels (such as telephone, emails, online portals and SMS) and to use existing materials with minimal adaptation makes it feasible to transfer this intervention to other SMEs within European contexts.

However, several elements will need to be in place to allow for successful adaptation, including the necessary financial resources, digital infrastructure, organisational capacity and supportive policy environment.

Sectoral and cultural adaptation will be needed, as different European countries have different working conditions and cultural attitudes towards WHP. In particular, the openness of a company to adapt and accept the advised changes will need to be taken into consideration. Due to COVID-19, STAR-VITAL became an intervention that is mostly suited to workers engaged in office and administrative work, due to the high content of digital material. This approach might need adapting if it is targeted at more active and manual jobs in other sectors. The material might also be adapted to the occupational risk exposures of a specific sector and its workforce characteristics.

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In this case study, interviews were carried out with:

- the co-authors of the publication on STAR-VITAL – Joint Measures for the Vitality of Older Workers,
- the researchers and programme managers/organisers.

Information is available on the official website at: <https://www.star-vital.si/>

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